

10. Proposed Projects for Key Transport Linkages

The projects for transport infrastructure are identified for all the modes of transportation viz. roads, rail, air, ports and logistics infrastructure based on the developmental strategies presented earlier.

10.1 Road Linkages

In order to provide better service levels in terms of higher speeds, savings in vehicle operating costs and travel time, a comprehensive road corridor improvement plan is being envisaged involving the following projects:

Table 4: Key Projects for Development/Improvement of Road Linkages

S. No.	Project Description	Length (Km)
1	Corridor Upgradation	
a	Upgradation (or new construction) of road link between Poipet and Bavet from 2-lane to 4-lane as access controlled expressway (Cambodia)	572
b	Upgradation of road link between Moc Bai and Vung Tau from 4-lane to 6-lane as access controlled expressway (Vietnam)	174
c	Upgradation of road link between Phnom Penh and Sihanoukville port from 2-lane to 4-lane as access controlled expressway (Cambodia)	226
2	New Road Links	
a	Construction of bypasses with access control around Phnom Penh City (Cambodia)	44
b	Construction of bypasses with access control around Ho Chi Minh City (Vietnam)	56
c	Development of road links from Dawei port to Bong Tee (Thailand border) and road from Bong Tee to Kanchanaburi in Thailand as 4-lane access controlled expressways	136
d	Construction of 4 lane access controlled expressway from Go Dau Ha to Vung Tau transshipment Port	163
3	Development/Upgradation of Service Links from Growth Poles/Nodes	
a	Upgradation of Road Link connecting Siem Reap with Battambang via Sisophon to 4-lane configuration (Cambodia)	85
b	Upgradation of road link between Can Tho and Ho Chi Minh City from 4-lane to 6-lane as access controlled expressway (Vietnam)	169
4	Development of connectivity to Rural Areas	
a	Upgradation of road between Chamkar Luang to Koh Kong from 2-lane to 4-lane as access controlled expressway	140
b	Development of important Rural Roads in Cambodia and Vietnam	4,000

Note: The entire corridor will also have user facilities consisting of petrol bunks, restaurants and rest rooms, truck parking and repairing facilities, etc. at every 50 km interval.

10.2 Railway Linkages

Given the low rail traffic volume at present, it is estimated that cross-border freight volume will not increase significantly in initial years of MIEC to make huge investments in development of multi country rail network. It is therefore proposed that upgrading the key domestic rail networks and enabling multi-modal transportation within the respective countries should be prioritized. In later phases, investments in rail network would be made to enable cross-border freight movement through integrated rail network.

The following projects are suggested for development/improvement for railway network:

Table 5: Key Projects for Development/Improvement of Railway Linkages

Strategy	Projects
Build or upgrade rail network at key high volume routes	Upgradation and double-tracking of Laem Chabang- Bangkok (ICD Lat Krabang) rail link ⁴⁷
	Construction of Ho Chi Minh City-Vung Tau (Cai Mep-Thi Vai Ports) rail link
	Rehabilitation of rail link from Sihanoukville Port to Phnom Penh (Cambodia) ⁴⁸
Establishment of continuous end-to-end rail links in MIEC supported by spur rail lines	Construction of missing link from Phnom Penh to Ho Chi Minh City
	Construction of missing link between Nam Tok (Thailand) and Dawei (Myanmar)
	Construction of missing link from Poipet to Sisophon (Cambodia)
	Rehabilitation of rail link from Sisophon to Phnom Penh (Cambodia)
	Establishment of rail transshipment terminal/yard as part of multi-modal logistics park at border crossings ⁴⁹
Upgradation of rail tracks to 20 tonne axle load	

10.3 Ports

The ports in MIEC will witness significant increase in traffic due to development of corridor and increased trade in MIEC with rest of the world. The upcoming/planned port capacities in MIEC region at present would not be able to cater to additional traffic demand generated from development of MIEC and most of the major ports would require capacity augmentation.

Particularly, in respect of India-Mekong trade, one of the anticipated benefits under the proposed port plan is that development of Dawei Port will reduce the travel distance and time for freight between India and Mekong. This will increase the competitiveness of the products from Mekong countries and spur their trade with rest of the world.

Ports at Vung Tau and Dawei have potential to become the gateway ports for the region. With the development of these gateway ports, the international cargo from western part of world bound for MIEC

⁴⁷ Note: Under implementation and expected to be completed by 2010

⁴⁸ Note: Already under implementation under assistance from ADB and expected to be completed by 2010

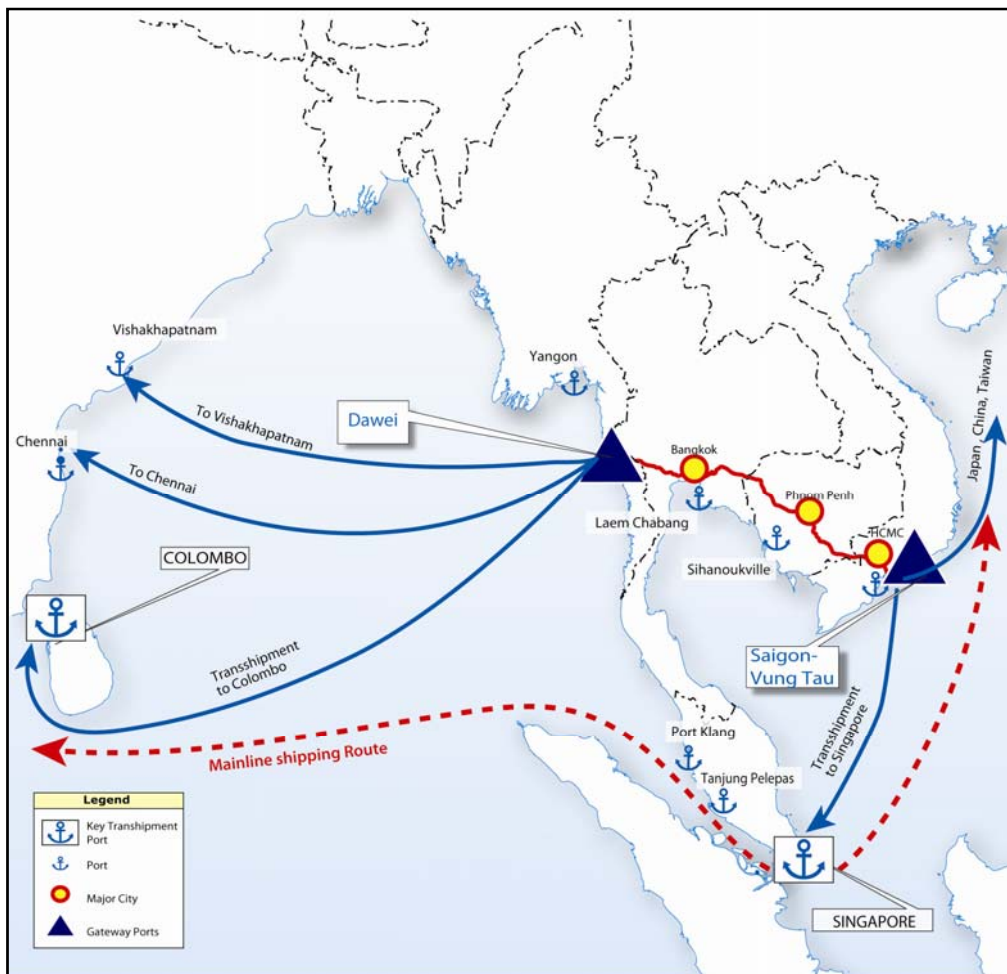
⁴⁹ Note: This yard will have rail-sidings, marshalling and shunting yard along with single 'Joint' customs-immigration-quarantine (CIQ) station wherein cargo and passenger can be transferred between countries

countries can be transshipped from Colombo, Vallarpadam or Vizhinjam to Dawei and cargo coming from east can be transshipped through Vung Tau. It is expected to bring in efficiency in sea transport because it would enable shipping lines to avoid heavily congested Malacca strait which also faces threat of piracy. It is therefore suggested that following projects be undertaken:

Table 6: Proposed Key Port Projects

Strategy	Project Description	Proposed Capacity (beyond 2015)
Expansion of ports capacity to meet the growing traffic demand	Expansion of Laem Chabang (Thailand)	1.5 million TEU
	Expansion of Sihanoukville (Cambodia)	0.3 million TEU
	Expansion of Cai Mep-Thi Vai Port (Vietnam)	6 million TEU
Development of ports to avoid congestion at Malacca Strait	Development of Greenfield port at Dawei (Myanmar)	1 million TEU
	Development of Transshipment Port at Vung Tau-Ba Ria province (Vietnam)	1 million TEU

Map 10: Sea ports in MIEC and Sea routes in South-East Asia Region



10.4 Airports

Air transportation infrastructure has recently been upgraded in Thailand, Cambodia, Vietnam and new plans have been prepared or under implementation to further improve the air infrastructure. The present projects and proposed expansion plans of existing airports by countries shall be adequate to meet both passenger and freight requirements of MIEC during the envisaged horizon period of this concept plan.

However, there is a need to upgrade some key airports in MIEC to boost the tourism potential of key tourism zone or nodes. There is also a need to focus of providing adequate infrastructure at airports to meet the growing demand for perishable cargo. Thus the following projects are proposed for airports in individual countries along with integration of existing plans as part of air transport strategy⁵⁰ for MIEC.

Table 7: Key Airport Projects for MIEC

Project Description	Status
Expansion of Suvarnabhumi Airport in Thailand	Already planned
Expansion of Siem Reap Airport in Cambodia	Already planned
Expansion of Phnom Penh Airport in Cambodia	Already planned
Construction of New Airport in HCM City in Vietnam	Under implementation
Upgradation/ Expansion of Can Tho Airport in Vietnam	Under implementation
Upgradation of Dawei Airport in Myanmar	Proposed under MIEC
Upgradation of Sihanoukville Airport in Cambodia	Proposed under MIEC
Upgradation of Dedicated Cargo facility for Perishable Cargo at Can Tho Airport in Vietnam	Proposed under MIEC

10.5 Multi-Modal Logistics Park

The Multi-Modal Logistics Parks (MMLPs) shall be developed in accordance with anticipated demand from key economic centres and development of other transportation particularly ports and rail. They constitute the landside infrastructure particularly impacting the efficiency of cargo movement through ports. Thus priority shall be given to MMLPs that cater to likely increased demand from port expansion and facilitate 'Just-in-Time' inventory management in order to reduce cost of logistics. Key projects of Multi-modal parks suggested are:

Table 8: Proposed Key Multi-Modal Logistics Parks at Key Locations

Location	Capacity	Components
Proposed Multi-modal Logistics Parks at Borders		
Aranyaprathet-Poipet (Thailand-Cambodia border)	0.5 Million TEUs	Interstate logistics complex, freight handling facilities, Rail Transshipment Yard, warehousing, container yard, CFS, truck parking, transfer facility, requisite equipments, etc.
Moc Bai - Bavet (Vietnam-Cambodia border)	0.3 Million TEUs	Interstate logistics complex, freight handling facilities, ware housing, container yard, CFS, truck parking, transfer facility, requisite equipments, etc.

⁵⁰ Note: For the purpose of this study, the detailed analysis and proposals on 'soft' aspects like air services, freedom rights, bilateral air service agreements, are not covered under the study.

Location	Capacity	Components
Bong Tee (Thailand-Myanmar border)	0.5 Million TEUs	Interstate logistics complex, freight handling facilities, ware housing, container yard, CFS, truck parking, transfer facility, requisite equipments, etc.
Proposed Multi-modal Logistics Parks at Ports		
Vung Tau - Ba Ria (Vietnam)	1 Million TEUs	New rail line between Ho Chi Minh City and Vung Tau with rail terminal, interstate logistics complex, freight handling facilities, ware housing, container yard, CFS, truck parking, transfer facility, requisite equipments, etc.
Sihanoukville (Cambodia)	0.4 Million TEUs	Nearby Sihanoukville port with rail terminal, interstate logistics complex, freight handling facilities, ware housing, container yard, CFS, truck parking, transfer facility, requisite equipments, etc.
Dawei (Myanmar)	0.65 Million TEUs	Nearby Dawei port with rail terminal, interstate logistics complex, freight handling facilities, ware housing, container yard, CFS, truck parking, transfer facility, requisite equipments, etc.
Proposed Multi-modal Logistics Parks at Growth Centres		
Prachinburi (Thailand)	0.5 Million TEUs	Logistics park, trade centre, warehousing (for finished products, inward raw material, incoming consumer goods), transport terminal, value-added services, requisite equipments, etc.
Battambang (Cambodia)	0.3 Million TEUs	ICD (dry port) cum logistics park, rail terminal, CFSs, container yard, truck park, customs bonded warehouse, requisite equipments, etc.

Map 11: Proposed Transportation Projects

